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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,127	10/01/2003	Stefan Kunzel	KUNZEL	3903
7590		09/24/2004	EXAMINER	
Henry M. Feiereisen		IP, SHIK LUEN PAUL		
Suite 4714		ART UNIT		
350 Fifth Avenue		PAPER NUMBER		
New York, NY 10118		2837		

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental
Office Action Summary

Application No.

10/677,127

Applicant(s)

KUNZEL ET AL.

Examiner

Paul Ip

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) ☐ Other: ____. |

Art Unit: 2837

DETAILED ACTION

Notification of Withdrawn the Last Office Action

1. Applicant's representative informed claims 18-22 were missing from the last Office action mailed on September 2 2004. Accordingly, the last Office action mailed on September 2, 2004 is hereby withdrawn. A new Office action including claims 1-22 have been examined according to the following paragraphs.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 10/1/03 in compliances with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2837

6. Claims 1, 4-18, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al (4,980,617) in view of Lyons et al (6,196,345).

With respect to claims 1, 4-18, and 21-22, the patent to Tajima et al discloses a speed control apparatus of a machine tool comprising a motor 1, at least one sensor (2, 3) for measuring the shaft position and speed of the motor, a differentiation device 7 for supplying the actual speed of the shaft, the actual speed of the shaft as an input signal to each of a plurality of feedback elements 13-1 to 13-K, with each feedback element providing an output signal that is negatively coupled and applied to a desired speed signal of a motor speed controller of a driving motor, and tuning each of the feedback elements to a specific oscillation frequency range of the shaft oscillations that is to be damped with different harmonic frequencies. Whereas, the claims require at least one sensor for measuring the actual position value of the shaft. However, the patent to Lyons et al shows in figure 2 that the speed sensor 212 comprises a shaft position sensor and a differentiation device 216 for sensing the speed of the motor shaft. Since Tajima et al shows the use of an encoder 3 and a position sensor 2 for sensing the position and speed of the motor shaft, the encoder 3 sensing the shaft position of the shaft, and the F/V CONV for converting the signal into speed signal, it would have been obvious to one of ordinary skill in the art to provide Tajima et al with the speed sensor 212 as taught or suggested by Lyons et al.

Claims 2, 3, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al (4,980,617) in view of Lyons et al (6,196,345) taken with Nagano (5,404,418) or Sidman et al (5,459,383). Claims 2, 3, and 19-20 further require that the feedback element is a band-pass or high-pass element. However, the patents to Nagano and Sidman et al disclose damping control systems comprising a high-pass element and a band-pass element. Since Tajima et al disclose damping control with different harmonic frequencies, it would have been obvious that different type of filters are used in order to produce different harmonic frequencies, it would have been obvious to one of ordinary skill in the art to provide Tajima et al with the high-pass or band-pass filter as taught or suggested by Nagano or Sidman et al.

Citation of Pertinent References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Rushmer et al (5,443,566), Katz (6,114,825), Bertrand et al

Art Unit: 2837

(4,195,337), Ivanov et al (4,267,496 and 4,395,904), Xu et al (6,072,297), Kubo et al (5,545,957), Skalski et al (5,403,751), Henze (4,630,187), Takeishi (5,691,614), Barsky et al (4,792,715), and JP1-304511 disclose negative feedback control for damping control of the motor systems.

Customer Services Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Ip whose telephone number is (571)-272-1941. The examiner can normally be reached on Monday to Friday from 6:30 a.m. to 3:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on (571)-272-1207. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Ip
Primary Examiner
Art Unit 2837